#### IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the applications:

### Listing of Claims:

- 1. (Cancelled)
- 2. (Currently Amended) An electromagnetic radiation absorber for absorbing radiation in the wavelength range  $\lambda_{min}$  to  $\lambda_{max}$  comprising a conductor layer in contact with a dielectric layer wherein the conductor layer earnies a plurality of apertures includes a plurality of slits of subwavelength dimension in a grating arrangement, and wherein the thickness of the absorber is less than  $\lambda_{min}/4n$ , where n is the refractive index of the dielectric, and wherein the absorber is flexible.
- 3. (Currently amended) An e/m radiation absorber as claimed in claim 2 wherein the thickness of the material absorber is less than  $\lambda_{min}/10$ .
- 4. (Cancelled).
- 5. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 4 wherein the slit structures are periodic in nature.
- 6. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 4 wherein the slit structures are curved.
- 7. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 4 wherein the slit structures comprise a series of non-parallel slits.
- 8. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 4 wherein the slit structures comprise a parallel slit arrangement.
- 9. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 8 wherein the wavelength  $\lambda$  of radiation absorbed is determined by

$$\lambda \approx 2nG/N$$

where  $\lambda$  is the wavelength in the range  $\lambda_{min}$  to  $\lambda_{max}$  where maximum absorption occurs, n is the

refractive index of the dielectric, G is the spacing of the slits and N is an integer greater than or equal to 1.

- 10. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 4 wherein the slit structure comprises two orthogonal sets of parallel slits.
- 11. (Currently amended) An e/m electromagnetic radiation absorber as claimed in any of claim 4 wherein the slit structures comprise three sets of parallel slits at 60 degree azimuthal separation.
- 12. (Currently amended) An e/m electromagnetic radiation absorber as claimed in any of claim 4 wherein the slit width is less than 400 microns.
- 13. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 12 wherein the slit width is less than 50 microns.
- 14. (Currently amended) An e/m electromagnetic radiation absorber as claimed claim 2 wherein the refractive index of the dielectric can be actively varied dielectric comprises a material having an actively variable refractive index.
- 15. (Currently amended) An adhesive tape comprising an e/m electromagnetic radiation absorber according to claim 2.

# 16-17 (Cancelled)

- 18. (Currently amended) A heating element for use in a microwave oven comprising an e/m electromagnetic absorber as claimed in claim 2.
  - 19. (Cancelled)

20. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 2 wherein the thickness of the material absorber is less than λ<sub>min</sub>/100.

## 21. (Cancelled)

- 22. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 2 elaim 20 wherein the absorber is backed with an adhesive material.
- 23. (Currently amended) An e/m electromagnetic radiation absorber as claimed in claim 2 wherein the dielectric layer is sandwiched between the conductor layer and a second conductor layer.

### 24-25 (Cancelled)

- 26. (New) An electromagnetic radiation absorber for absorbing radiation in the wavelength range  $\lambda_{min}$  to  $\lambda_{max}$  comprising a conductor layer in contact with a dielectric layer wherein the conductor layer includes a plurality of slits of sub-wavelength dimension, wherein the thickness of the absorber is less than  $\lambda_{min}/100$ .
- 27. (New) An electromagnetic radiation absorber according to Claim 26, wherein the absorber is flexible.
- 28. (New) An electromagnetic radiation absorber according to Claim 26, wherein the plurality of slits are arranged in a bigrating.
- 29. (New) An electromagnetic radiation absorber according to Claim 26, wherein the dielectric comprises a material having an actively variable refractive index.
- 30. (New) An electromagnetic radiation absorber according to Claim 26, comprising a further conductor layer arranged such that the dielectric is sandwiched between the conductor layer and the further conductor layer.